

## Exercise

# Building Dashboards with Tableau

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## Summary

1. Module: Data Visualization<sup>1</sup>
2. Lesson: Dashboards
3. Sub-topic: Building Dashboards Using Tableau
4. Objective: Introduction to building an interactive dashboard with Tableau
5. Time Allotment: 120 minutes

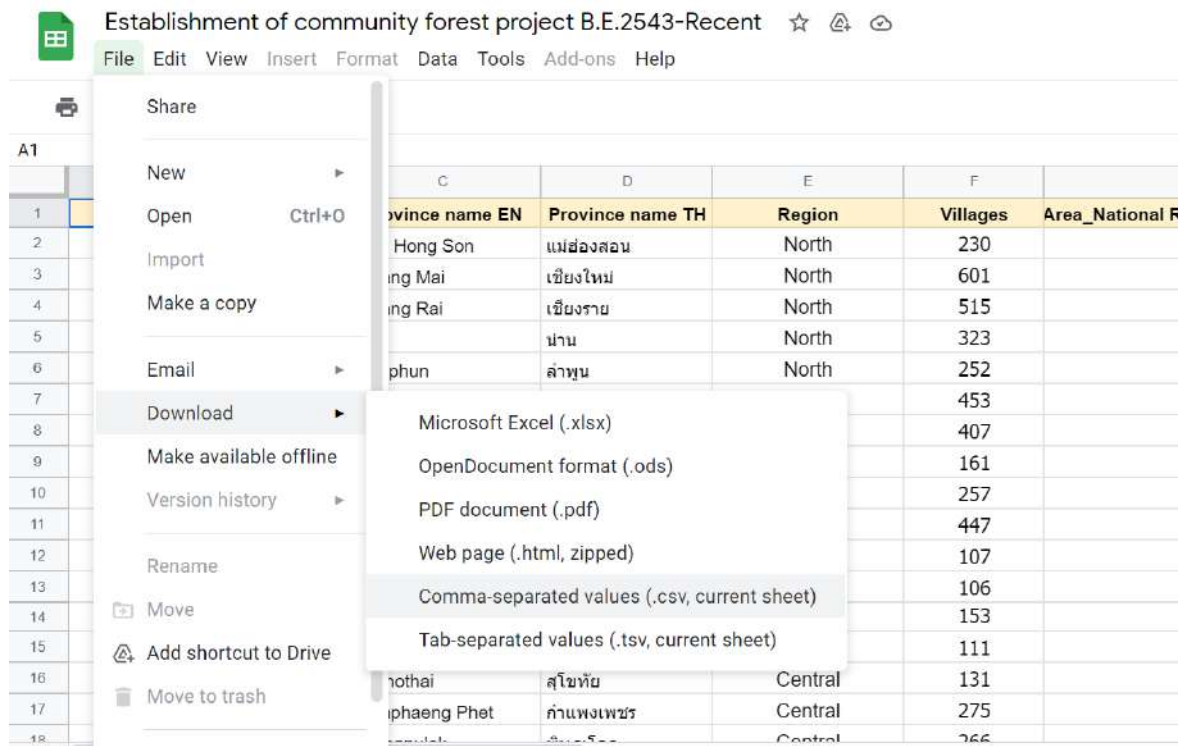
## Steps

### Getting Data into Tableau

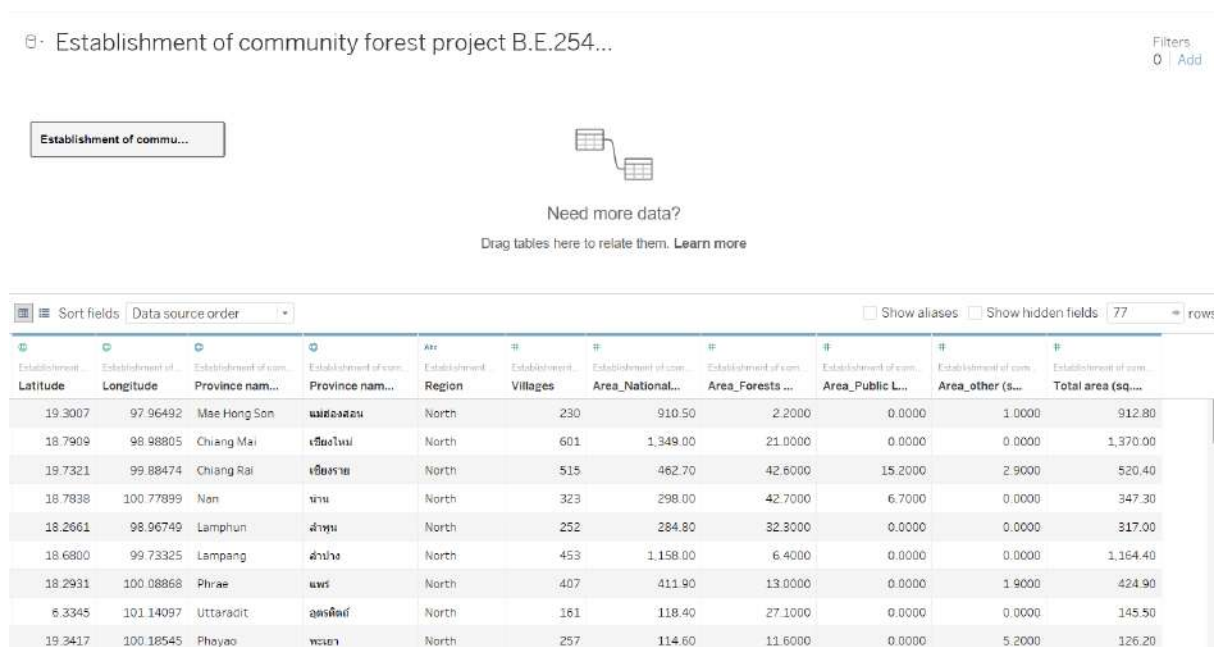
We start up downloading a CSV version of the dataset. Click on File -> Download -> Comma-separated values.

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<sup>1</sup> This lesson was adapted from the World Bank's Introduction to Data Literacy training manual by Eva Constantaras, and adapted by Yan Naung Oak, Open Development Cambodia and Open Development Initiative, and is licensed under a [Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License](#). For full terms of use, see [here](#).



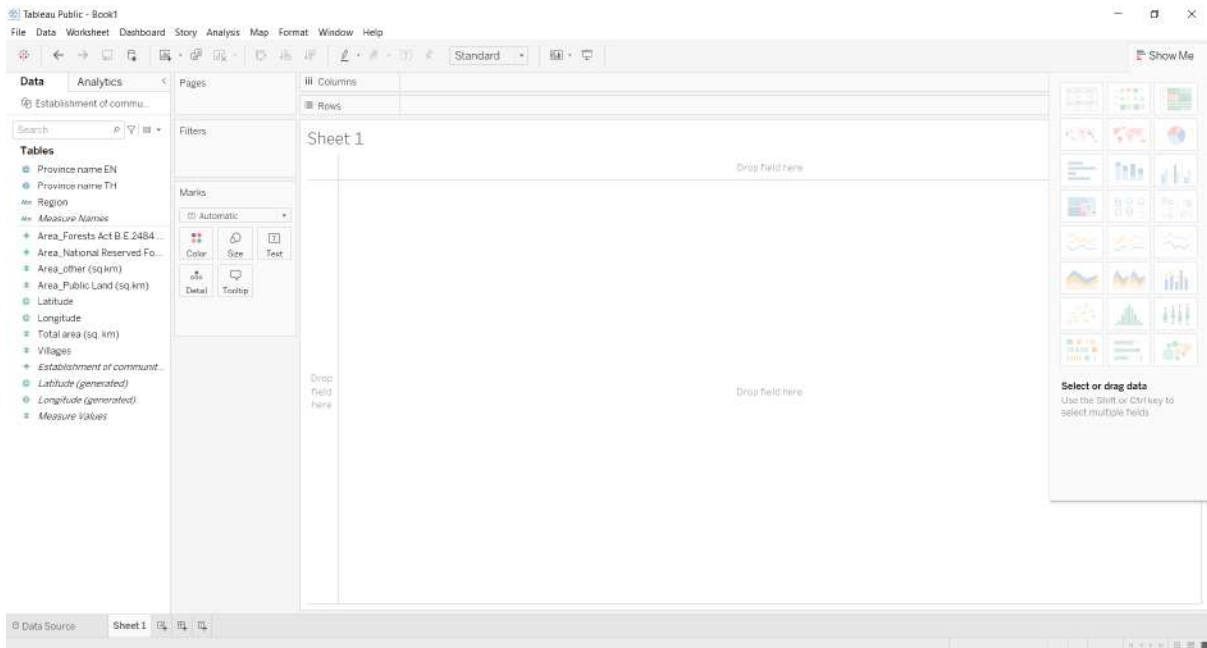
Click Add Connection on Tableau and Click Text file. Next, choose the CSV file that you downloaded from Google Sheets. A preview of the data should appear.



Next, click on the "Sheet 1" tab to start making a chart.



This is the view that you will see when you go to Sheet 1. On the left you can see all the columns in your dataset. They are separated into Dimensions, which show categories, and Measures, which shows numbers.

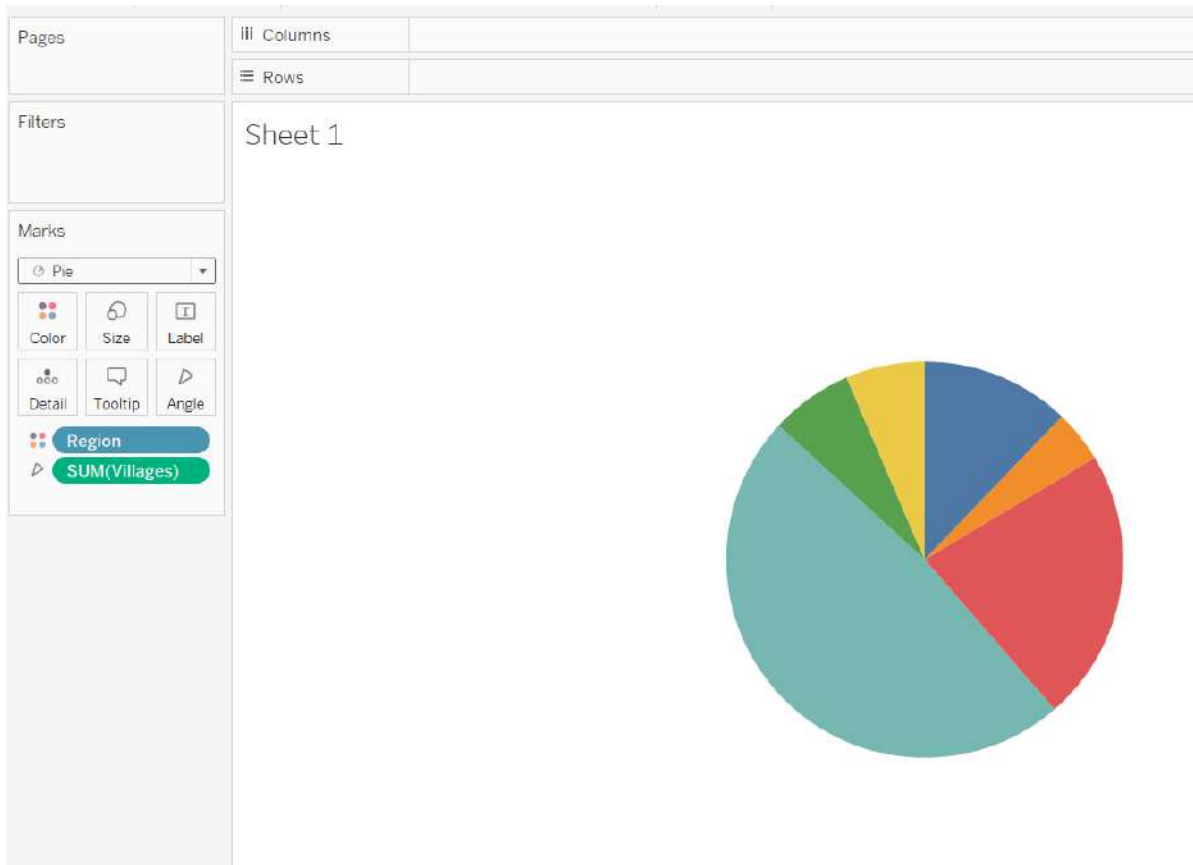


## Pie Chart

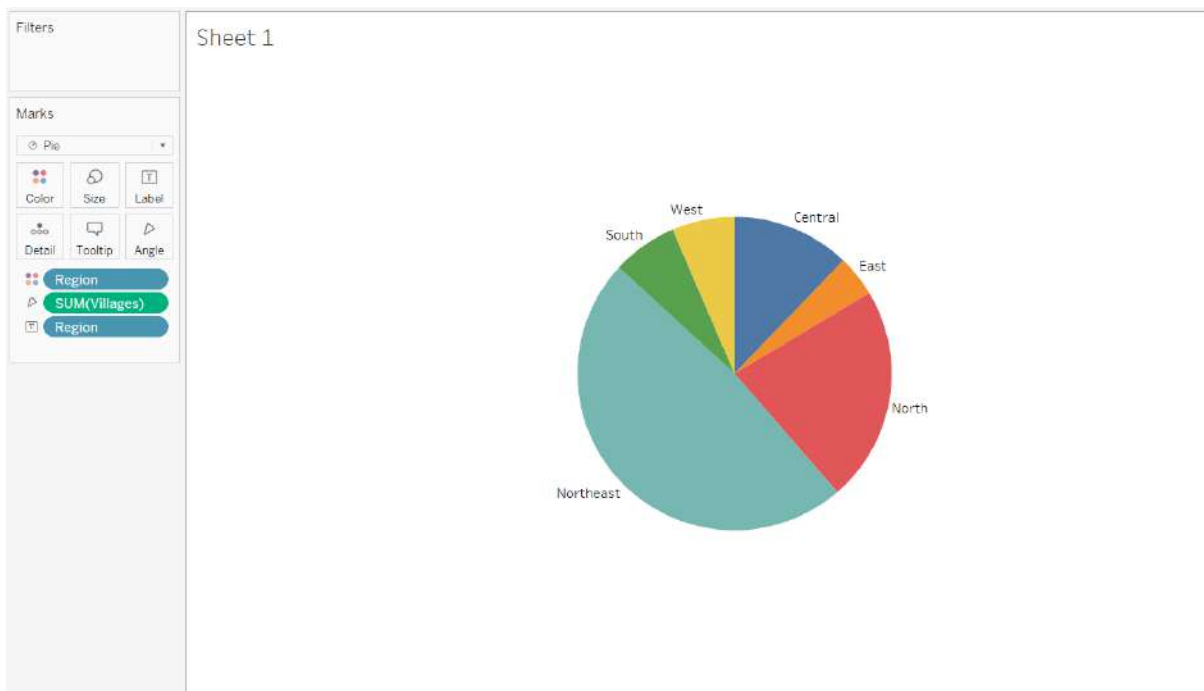
Let's start with a pie chart of the **total number of villages of different regions.**

- First drag the "Region" dimension to the Color box under Marks.

- Next, drag "Villages" to the Angle box.



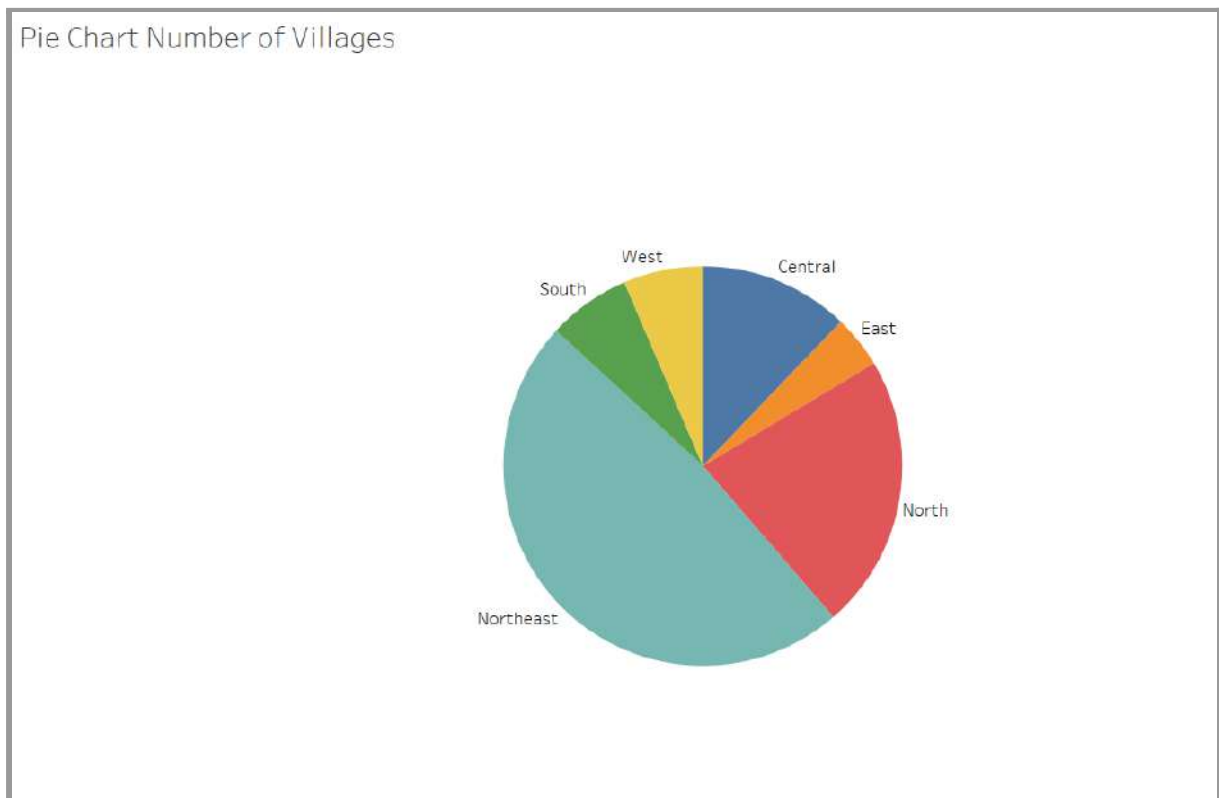
Next, we want to label our pie chart. To do this, we drag "Region" to the label box.



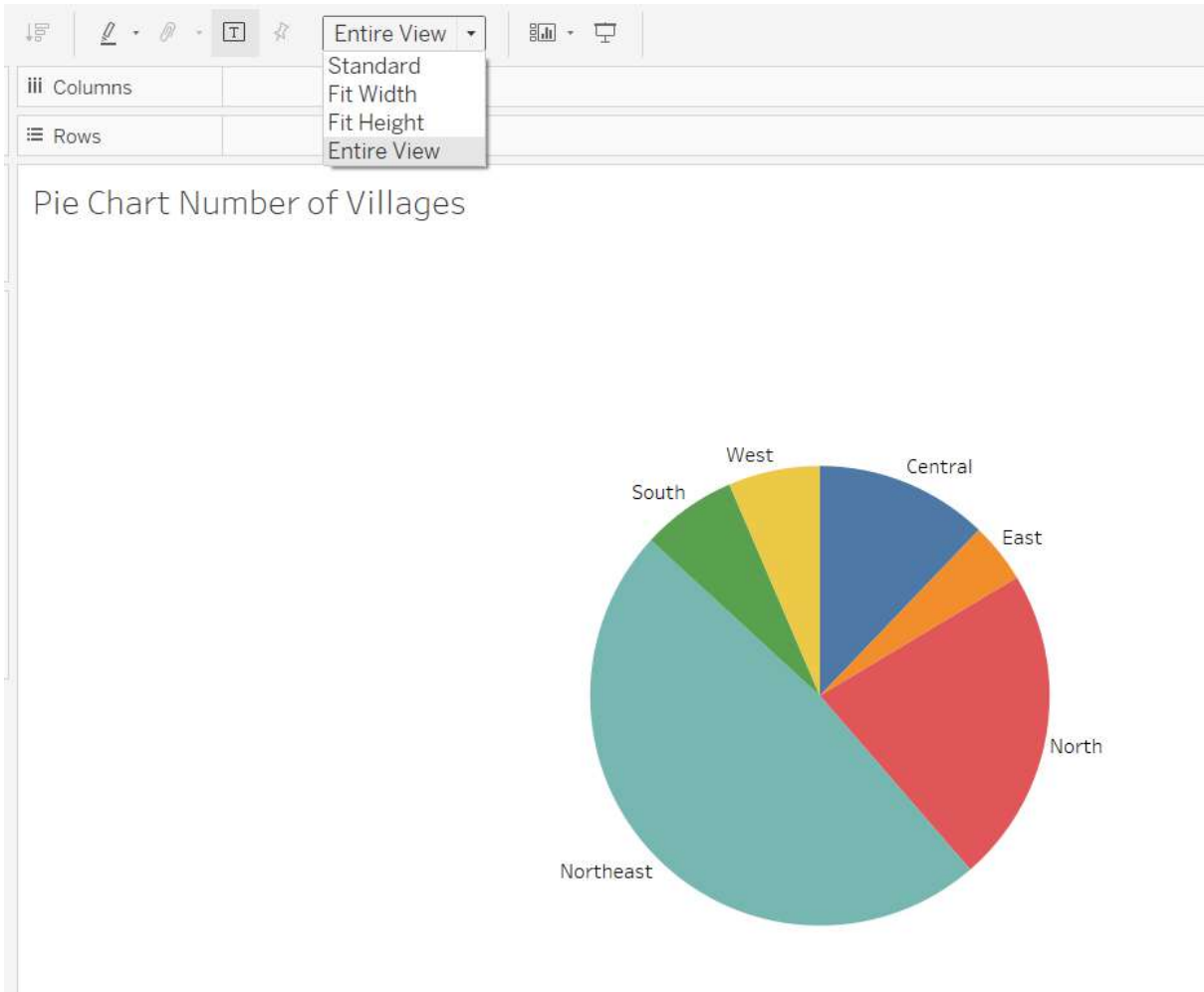
Next, we change the name of the tab to something more relevant, such as “Pie Chart\_number of villages”.



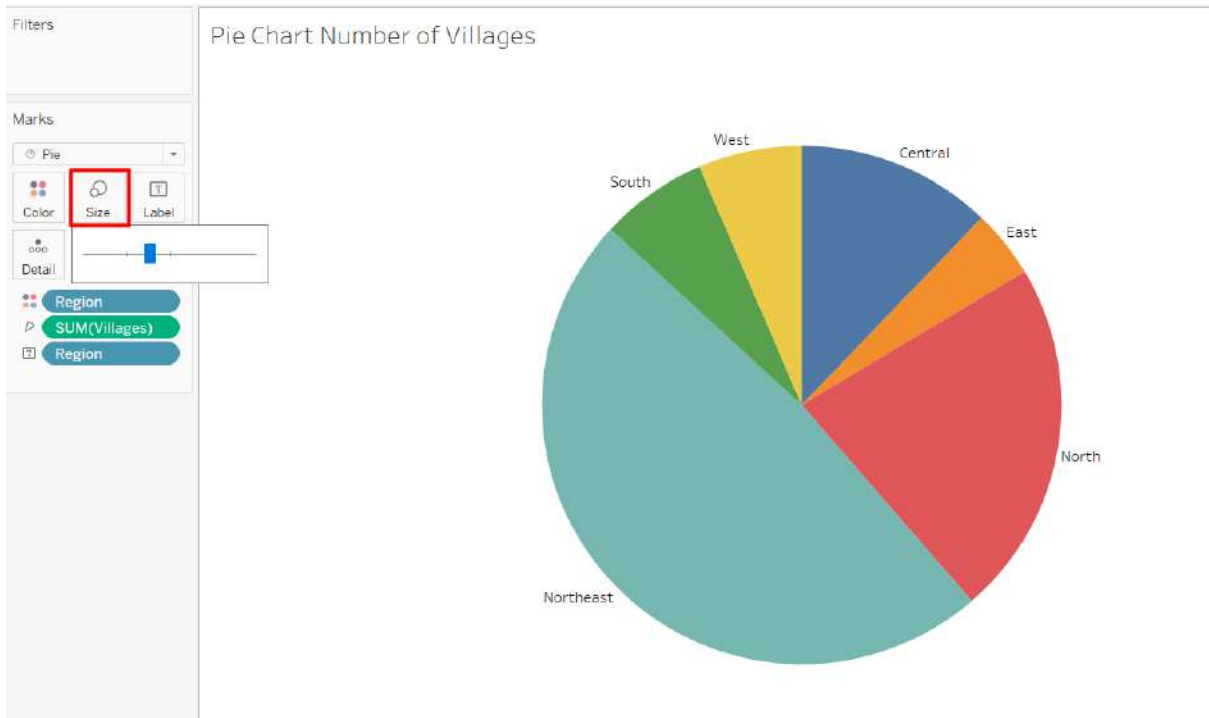
This will also change the label of the chart.



We're done with making the pie chart, but visually, it looks too small. To resize it, click on “Entire View” in the dropdown box seen in the screenshot below.



This increases the size of the pie chart.



To further increase its size, you can click on the size box, and drag on the slider until the chart fills most of the screen.

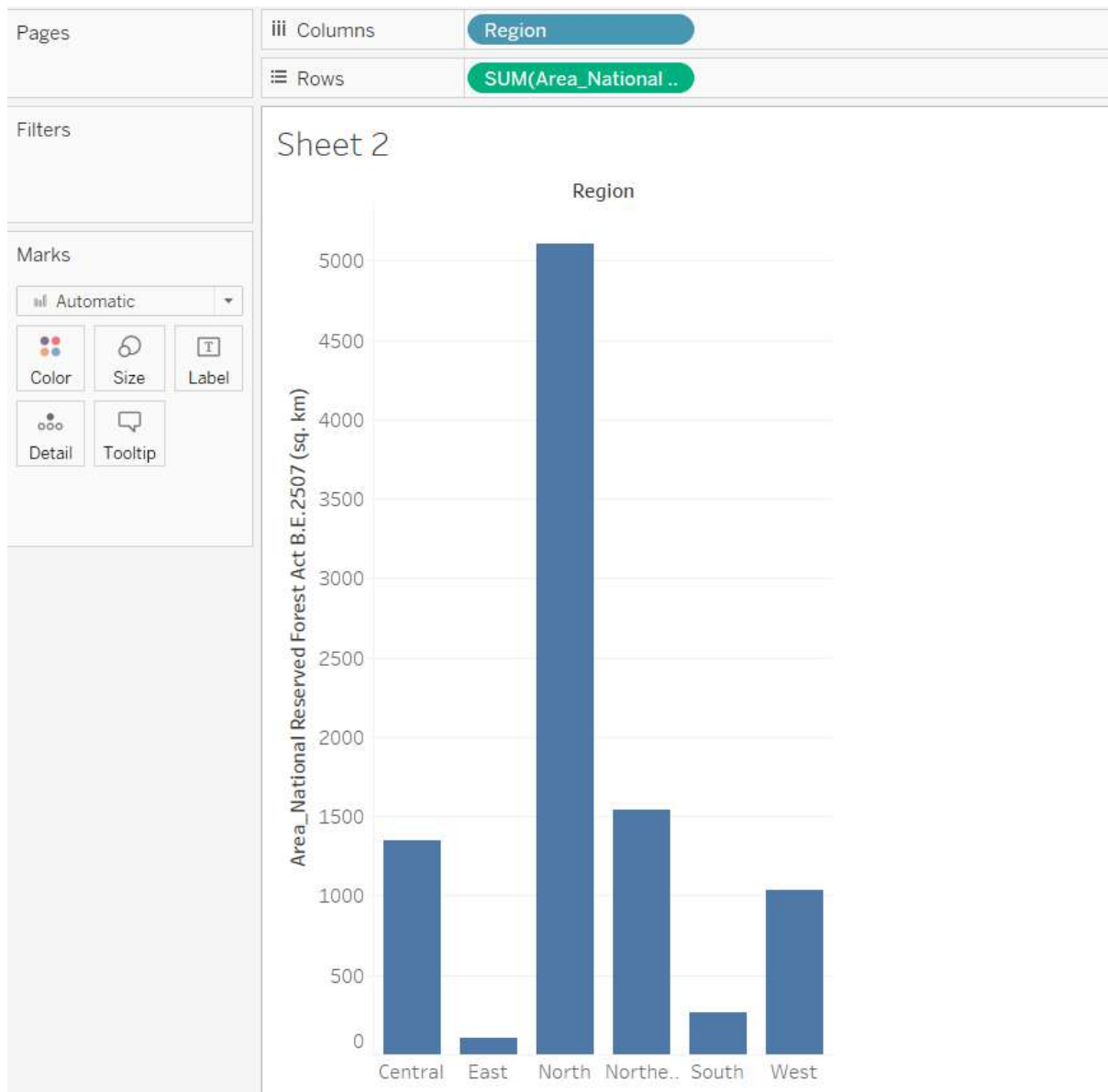
## Bar Chart

The next chart we want to make is a simple bar chart

Click on “New Worksheet” to bring up a new sheet on the tab bars below.

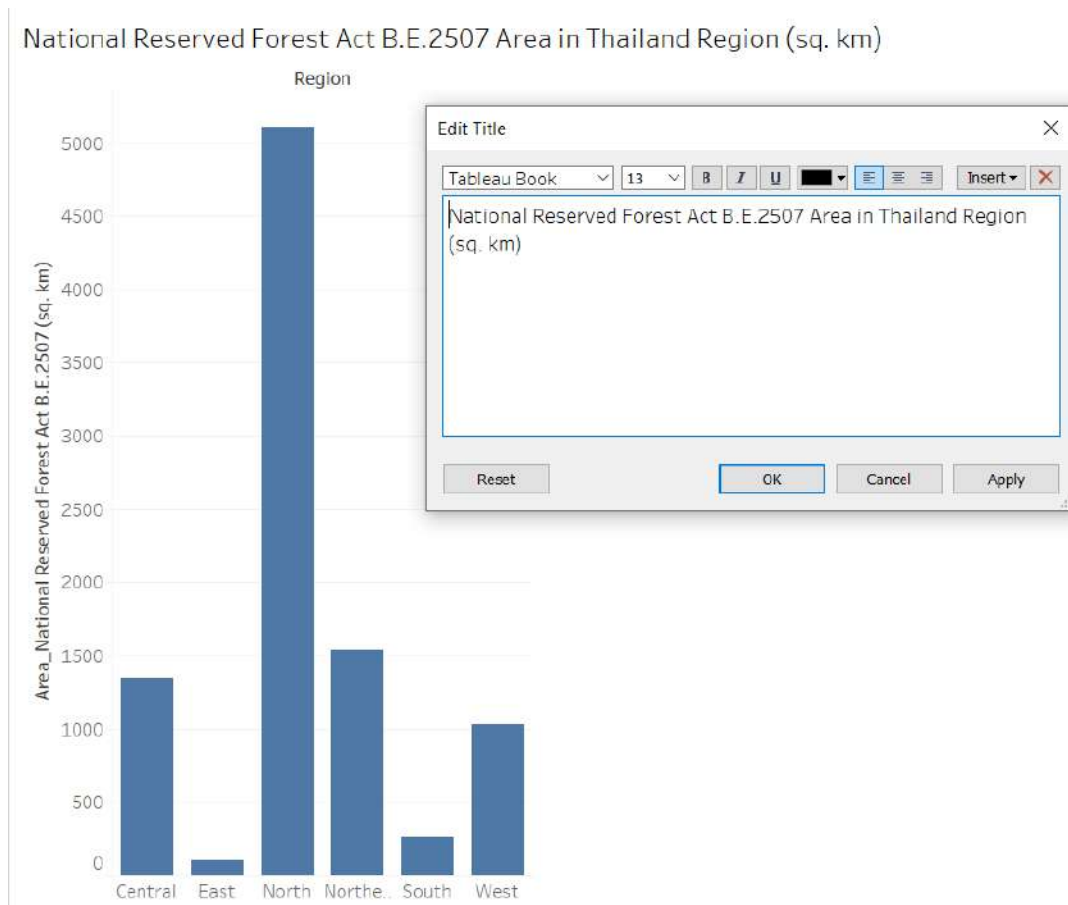


To do so we drag “**province**” to the Columns box and “**Area\_National Reserved Forest Act B.E.2507 (sq. km)**” to the Rows box. And that’s it! You’ve got a bar chart.





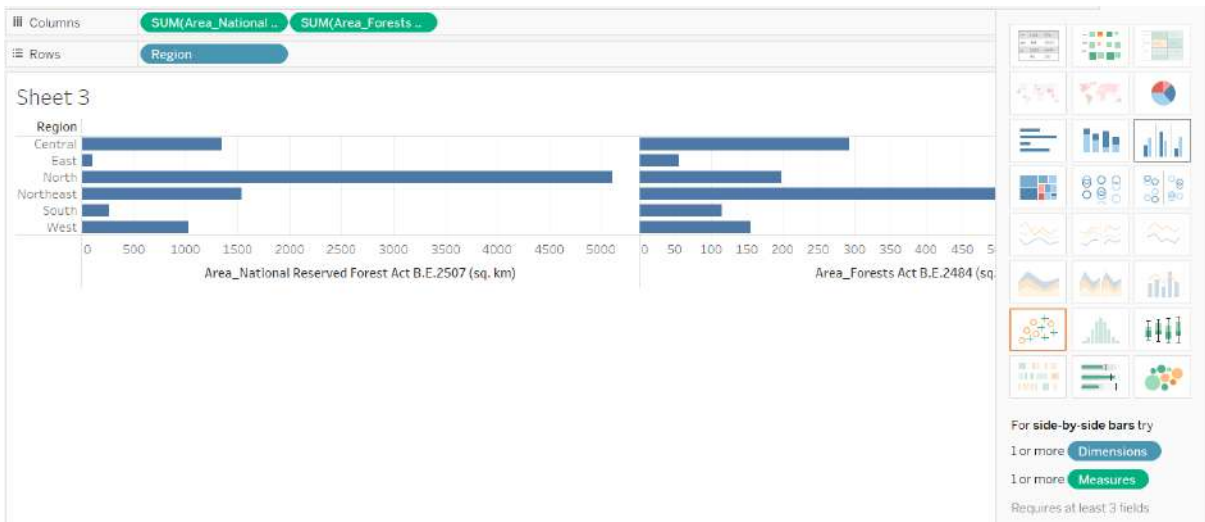
We can rename the tab to change the title of the chart.



## Side-by-Side Bar Chart

Next, let's make a side-by-side bar chart, showing the area of forest by region

First, drag "Region" to Rows. After that, drag "Area\_National Reserved Forest Act..." and "Area\_Forests Act..." to Columns.



Next, click “side-by-side bar” to change chart type.



Rename the tab. And we're done with our chart.



## Circle Packing Chart

Now let's try a more unusual type of chart.

First, drag "Region" to Color. This is the area that is separate in each project.

Then drag "Area\_National Reserved Forest Act B.E.2507 (sq. km)" to Size.

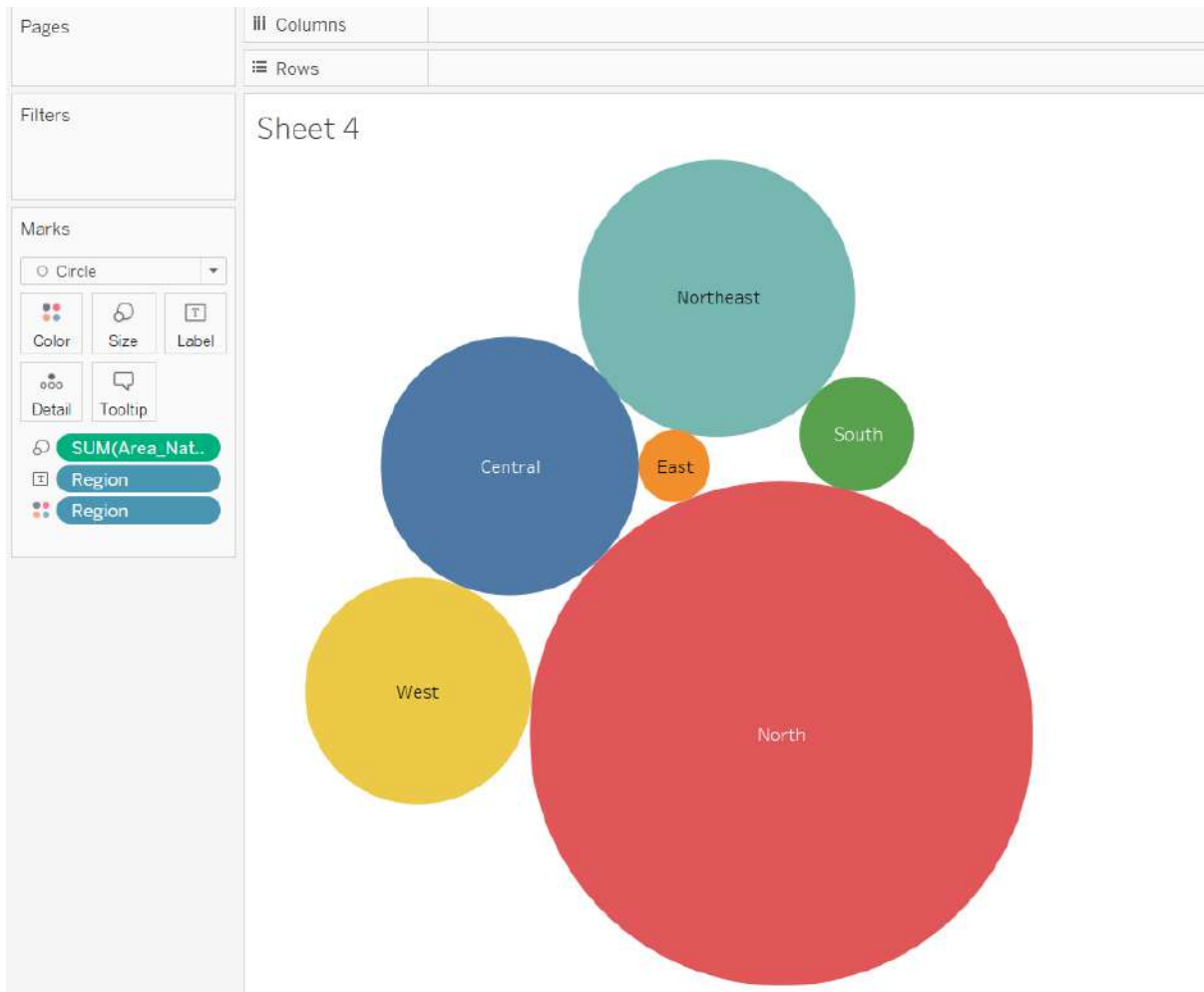
By default, you will get a treemap.



To change the chart type from a treemap to a circle packing chart, click on the Show Me tab on the top right, and select the circle packing chart.



You will see the following chart.



### Edit Label

Tableau Book 9 B I U [Color] [Align] [Insert] X

Text: **<Region> of Thailand**

Font: Tableau Book, 9pt, ...

Alignment: Automatic

Marks to Label: All Selected Min/Max Highlighted

Options:  Allow labels to overlap other marks

Reset Preview **OK** Cancel Apply

## Edit Tooltip

Tableau Book | 10 | B | I | U | Insert | X

Region: <Region>, Thailand  
Forest Area of National Reserved Forest Act B.E.2507:  
<SUM(Area\_National Reserved Forest Act B.E.2507 (sq. km))> sq. km.

Show tooltips Responsive - Show tooltips instantly  
 Include command buttons  
 Allow selection by category

Reset Preview OK Cancel

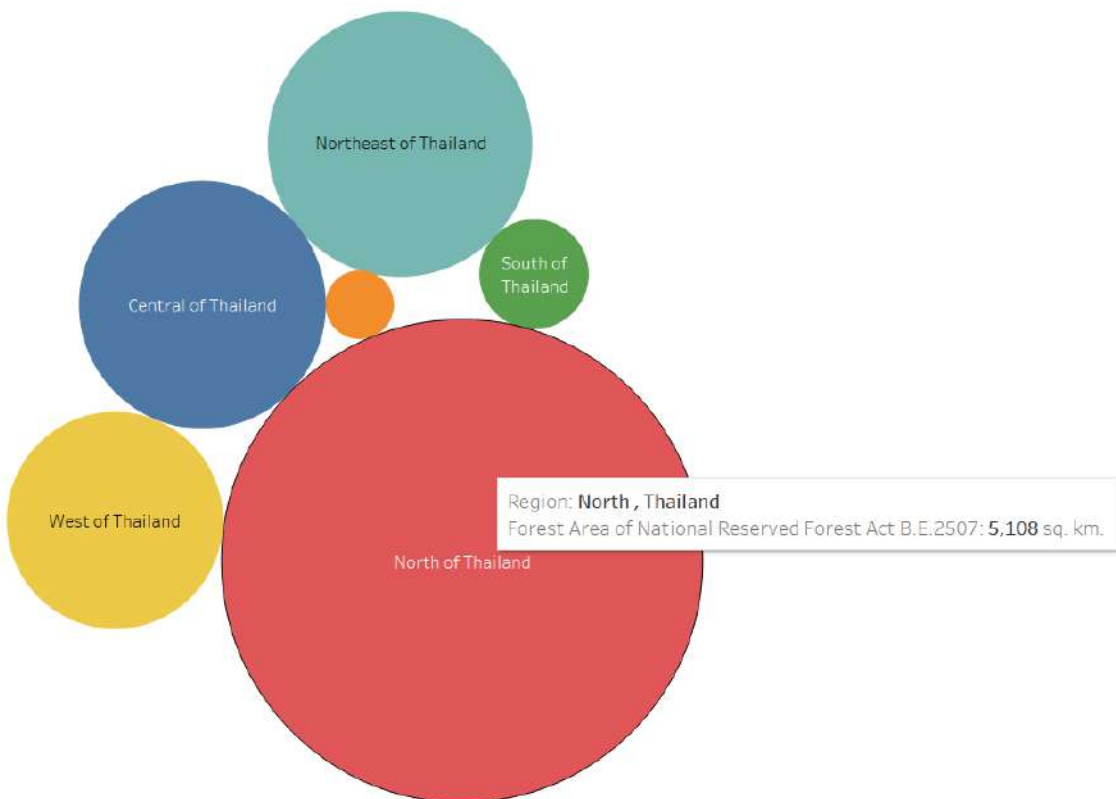
Marks

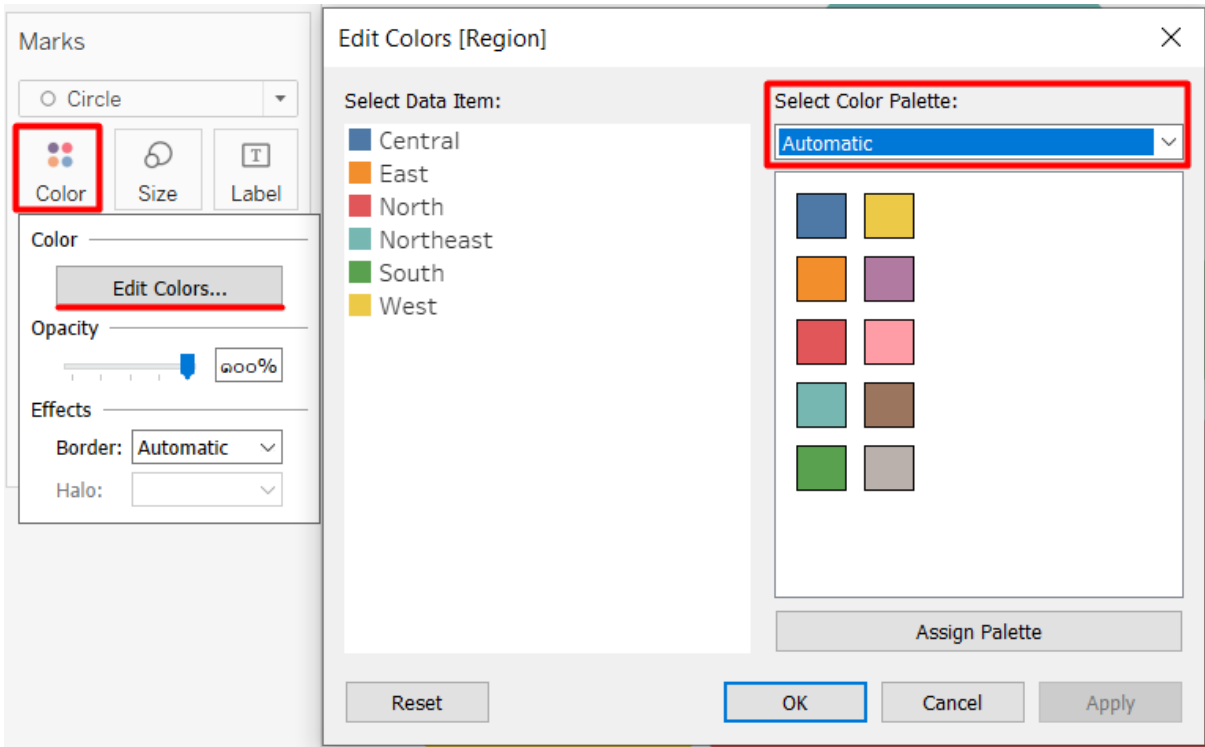
Circle

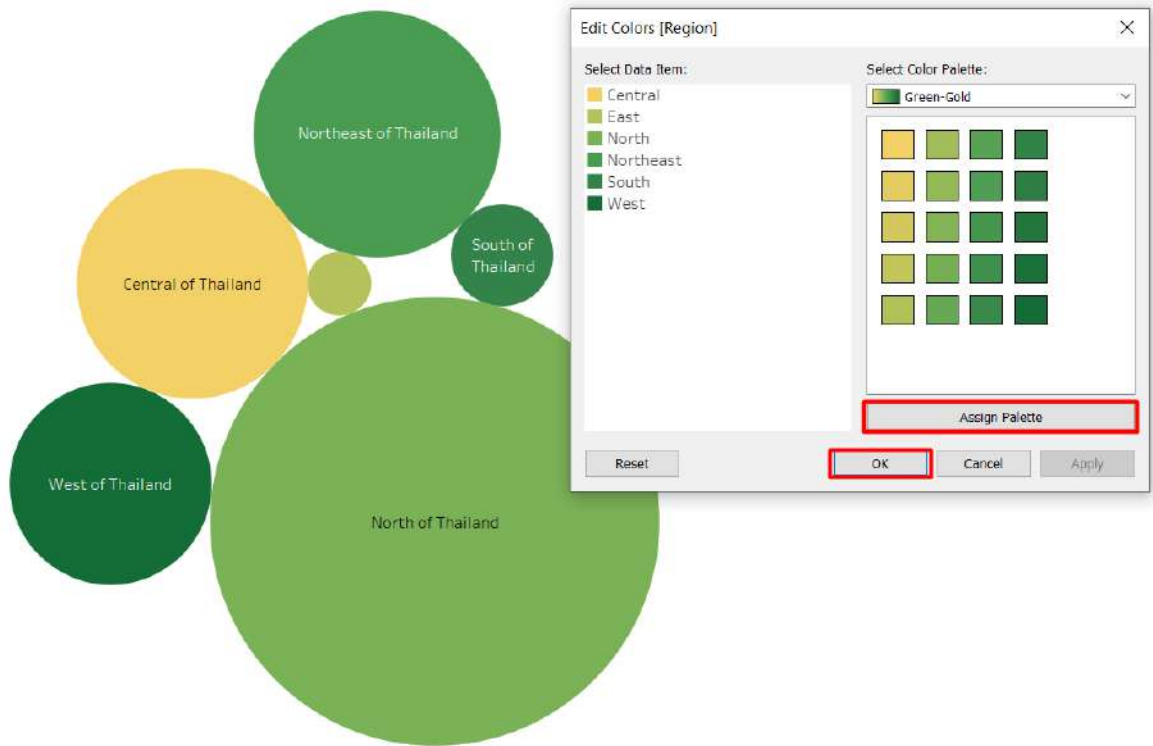
Color Size Label

Detail Tooltip

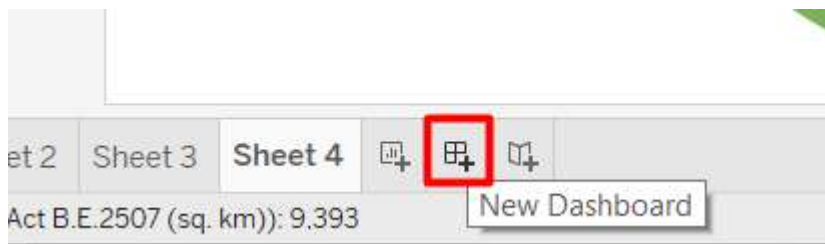
SUM(Area\_Nat..)  
Region  
Region







## Combining Everything into a Dashboard





## Saving your Notebook

File	Data	Worksheet	Dashboard	Story
New				Ctrl+N
Open...				Ctrl+O
Open from Tableau Public...				Alt+O
Close				
Save to Tableau Public...				Ctrl+S
Save to Tableau Public As...				
Show Start Page				Ctrl+2
Paste				Ctrl+V
Manage My Profile...				
Workbook Locale				▶
1 Book1				
Exit				



Email

Password

**Sign In**

 This site is SSL encrypted

[Forgot your password?](#)

[Don't have a profile yet?](#)

**Create one now for free**



### Processing Request

Sending data to server

Elapsed time 00:07

**Cancel**

## ⚠ Save Workbook to Tableau Public



Publishing this workbook will make it available on the Tableau Public website. Make sure it doesn't contain private or confidential information.

Workbook Title

## Further Practice

Improve your dashboard's design

- Try to apply the tips that we covered in the Dashboard Design section to improve the design of your dashboard